

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

THE CORRECT NAME FOR THE LEAST SHORT-TAILED
SHREW (*CRYPTOTIS PARVA*) OF GUATEMALA
(MAMMALIA: INSECTIVORA)

BY CHARLES O. HANDLEY, JR., AND JERRY R. CHOATE
*Smithsonian Institution, Washington, D.C., and Museum of
Natural History, The University of Kansas, Lawrence*

The nomenclatorial history of the least short-tailed shrew of Guatemala (a subspecies of *Cryptotis parva* Say) is complicated, and the name currently used for that animal is invalid. To summarize briefly, Gray (1843 and 1862) used a *nomen nudum*, *Corsira tropicalis*, for a shrew from Cobán, Guatemala. Tomes (1862) described a shrew from Dueñas (later corrected by Alston to Cobán), Guatemala, as *Sorex micrurus*. Alston (1877) observed that the names *Corsira tropicalis* Gray and *Sorex micrurus* Tomes represented the same taxon, and on Coues' advice placed them in the genus *Blarina*. *Sorex micrurus* Tomes 1862 thus became a secondary homonym of *Galemys micrurus* Pomel 1848 (= *Sorex talpoides*, now *Blarina brevicauda talpoides*, Gapper), a fact noted by Merriam (1895) when he revised the genus *Blarina*. After being validated by Merriam's description, *Blarina tropicalis* (later *Cryptotis tropicalis*) was used for the Guatemalan least short-tailed shrew until Miller (1924) disregarded the rule "once a homonym, always a homonym" and resurrected the name *Sorex micrurus* Tomes. This name has continued to be used to the present time in violation of the International Code of Zoological Nomenclature.

The nomenclatorial history of the Guatemalan least short-tailed shrew began with the publication of the following unsigned notice in the Proceedings of the Zoological Society of London (1843:79): "Various species of *Mammalia* from



Coban [*sic*], in Central America, were exhibited. These specimens were from Mr. J. Gray, who in a letter which accompanied them addressed to the Curator, observes that the collection contains the following species: viz. *Mustela frenata*, Licht., *Didelphys Quica*, *Heteromys Desmarestiana*, *Corsira tropicalis*, *Corsira Temlyas*, *Saccophorus Quachil*, *Mus Tazamaca*, and *Mus Tegulina*; all of which species, with exception of the first two, are new to science."

Gray was correct in his assumption that most of his specimens represented unrecognized species, but he neglected to provide descriptions and the names he applied thus were *nomina nuda*. Subsequently, Gray and others described all the species that he initially had indicated were new.

As late as 1862 Gray (p. 115) continued to use the *nomen nudum*, *Corsira tropicalis*, for a skin and skull representing a least short-tailed shrew from Cobán, "S. America" [= Guatemala]. In the same year, Tomes (1862:279), reporting on a collection of mammals from Dueñas, Guatemala, described as new a least short-tailed shrew that he named *Sorex micrurus*. His material consisted of a skin with skull and two specimens in spirits. Regarding those specimens, R. W. Hayman (*in litt.*, 24 April 1958) reported: "We have the skin and skull here as B. M. 7.1.1.33. Thomas marked this number in the margin of our PZS in Tomes' description, and labelled the specimen co-type and lectotype. The main label on the skin is written by Thomas and gives Dueñas as the locality, no doubt on the strength of Tomes' statement in the heading on p. 278 ('Report of a collection of mammals made by Osbert Salvin, Esq., F.Z.S., at Dueñas, Guatemala; with notes on some of the species, by Mr. Fraser'). The collectors are named on this label as O. Salvin and L. Fraser. In addition to the label provided and written by Thomas, the skin also has a small round card label bearing the following, 'Guatemala 2778 Fraser 1859' on one side, and on the reverse 'S. micrurus. Skull.' We should not think this is likely to be the original collector's label, but probably one put on by Tomes. The skull is also labelled as the skin, with Thomas' handwriting.

"There are two more skins in the Tomes collection, nos.

7.1.1.34 and 35, both labelled Cobán. Neither has any collector's name on the label but according to the register [both] were received from Leadbeater, a dealer. Thomas labelled one of these '*Corsira tropicalis*—one of the original series—on a B. M. stand [indicating that the specimen had been mounted for exhibit]. Received with Tomes' Collection.'"

Alston (1877:446) finally began to unravel the mounting, but as yet relatively unnoticed, confusion: "I may here observe that the Shrew named *Corsira tropicalis* by Gray, at the same time as the above [*Corsira temlyas* Gray = *Sorex veraepacis* Alston], seems to be the same as that subsequently described as *Sorex micrurus* by Mr. Tomes (P. Z. S., 1861 [*sic*], p. 279). Dr. Coues informs me that it proves to belong to the division of *Blarina*, which have thirty-two [*sic*] teeth; but whether it is distinct from some of the described North-American species remains to be ascertained. . . .

"*Corsira tropicalis* [Gray] = *Blarina micrura* (Tomes). . . ."

A note by Coues (1877:638) clarified Alston's remarks:

"This [*Blarina micrura*] is a 30-toothed *Blarina* (subg. *Soriciscus*), very closely related to United States species like *B. cinerea*, *B. exilipes*, and *B. berlandieri*, if really distinct.

"A short time ago I sent a number of Shrews to my valued correspondent Mr. E. R. Alston, of London, begging him to compare them with the types of certain species preserved in the British Museum.

"Among the Shrews sent to him was a specimen [*Cryptotis orophila*, USNM 38474] from Costa Rica (coll. J. Carmiol), of which he states:—"I have little or no doubt that it is the same as *Sorex micrurus* Tomes. . . I have not access to Mr. Tomes's types, but I have examined another of Mr. Salvin's specimens, in spirits, and have no doubt your animal is the same. I also believe that Gray's *Corsira tropicalis* is the same, though the types look darker from dirt.'"

Next, Alston (1879:56) corrected the type locality of Tomes' *Sorex micrurus*: "the species was described by Mr. Tomes from specimens collected by Mr. Salvin near Coban [*sic*] (not Dueñas as stated by Mr. Tomes), one of which was picked up dead in a forest path." Commenting on this statement, R.

W. Hayman (*in litt.*, 24 April 1958) noted that: "since Alston was presumably in touch with Salvin sufficiently to be able to quote the circumstances of the finding of one of the specimens, it seems likely that his reference to Cobán rather than Dueñas is the correct one."

From 1877 until 1911, *Sorex micrurus* Tomes was included in the genus *Blarina* as a secondary homonym of *Galemys micrurus* Pomel, in turn a subjective synonym of *Sorex talpoides* [currently *Blarina brevicauda talpoides*] Gapper. The homonymy was detected by Merriam (1895:21):

"When *Sorex micrurus* Tomes (1861 [*sic*]) was transferred to the genus *Blarina* it became preoccupied by *Galemys* (*Brachysorex*) *micrurus* Pomel (1848), which is a synonym of *Blarina brevicauda* (Say), and therefore is not available. No other name seems to have been proposed for the species except *tropicalis* Gray, which is a *nomen nudum*. The name, however, is peculiarly appropriate, the species being closely restricted to tropical America; hence I here reinstate it to replace *micrurus*, but it will have to date from the present paper."

Merriam, in redescribing *tropicalis*, listed Cobán, Guatemala, as the type locality and referred to two specimens measured by Tomes (*loc. cit.*) as the "original type specimens."

In their early checklists, Miller and Rehn (1901:247) and Miller (1912:25) regarded *Blarina tropicalis* Merriam as the proper name for the Guatemalan least short-tailed shrew. However, in his 1924 checklist Miller (p. 32), by *lapsus* or perhaps because of the removal of 30-toothed shrews from the genus *Blarina*, reverted without comment to *Sorex micrurus* Tomes as the valid name for this shrew. All subsequent authors [see particularly Cabrera (1925:134), Hall and Kelson (1959:62), and Goodwin (1969:41)] have used *Cryptotis micrura* as the name for the Guatemalan least short-tailed shrew.

Such usage, however, is contrary to both the International Rules of Zoological Nomenclature, 1905, and the International Code of Zoological Nomenclature, 1961. Article 57 of the Code states: "The Law of Homonymy applies to species-group

names originally published in (primary homonyms), or later brought together in (secondary homonyms) the same genus or collective group, except as noted in Article 59c." Article 59c states: "A name rejected after 1960 as a secondary homonym is to be restored as the valid name whenever a zoologist believes that the two species-group taxa in question are not congeneric, unless it is invalid for other reasons." The only potential problem of interpretation of Article 59c in this instance involves whether rejection of the name *micrura* as a secondary homonym dates from 1895 (Merriam, *loc. cit.*) or, as a consequence of its erroneous revival, from the present paper. But, as we have clearly shown, rejection of the name *micrura* dates beyond any reasonable doubt from Merriam's precise statement to that effect, and Article 59c thus does not apply.

In accordance with the Code, the name *micrura* must be rejected if it was a homonym when it was included in the genus *Blarina*. It appears to us, therefore, that the fundamental question as to the fate of the name *micrura* relates to the correct generic identity of *G[alemys]. micrurus* Pomel.

The problem of the identity of *G[alemys]. micrurus* traces back to 1842, when De Kay (p. 17) redescribed *Sorex dekayi* Bachman, erroneously attributing to it four upper unicuspid and a total of 30 teeth. He stated (p. 18) that:

"The specimens from which our description is taken, were obtained from Queens county, and were described and exhibited before the Lyceum of Natural History nearly fifteen years ago. I then gave it the name of *concolor*, but the description was never published. Dr. Bachman [1837:377], who examined the same specimen, gave the present name [*Sorex dekayi*], which, by the just and rigid rule of priority, must be preserved."

Pomel (1848:249) included *Sorex dekayi* De Kay and *Brachysorex harlani* Duvernoy in section *Brachysorex* of his genus *Galemys*, which was characterized in part by four upper unicuspid and a total of 30 teeth. Presumably he would have included *Sorex dekayi* Bachman, with five upper unicuspid and a total of 32 teeth, in the genus *Sorex*. Owing to De Kay's

faulty description, Pomel therefore seemingly believed that the names *Sorex dekayi* Bachman and *Sorex dekayi* De Kay applied to two different kinds of shrews (and not to the same shrew, as we have shown). Because of this conflict, he renamed *Sorex dekayi* De Kay as *Galemys micrurus*.

It thus appears certain to us that the names *Sorex dekayi* Bachman, *Sorex dekayi* De Kay, and *Galemys micrurus* Pomel were applied not only to the same kind of shrew but to the same specimens, and that all are synonymous with *Sorex talpoides* Gapper. Merriam's (*loc. cit.*) contentions that *Sorex micrurus* Tomes was preoccupied and that the proper name for the Guatemalan least short-tailed shrew was *Blarina tropicalis* Merriam were valid statements of fact. Inasmuch as there is no other available name for *tropicalis*, Article 23b concerning *nomina oblita* does not apply in this instance, and the pertinent synonymy of this shrew therefore should stand as follows:

Cryptotis tropicalis Merriam

- 1843. *Corsira tropicalis* Gray, Proc. Zool. Soc. London, p. 79, *nomen nudum*.
- 1862. *Sorex micrurus* Tomes, Proc. Zool. Soc. London, 1861: 279. Lectotype—British Museum (Natural History) no. 7.1.1.33; skin and skull; obtained in 1859 by O. Salvin and L. Fraser; Cobán, Alta Verapaz, Guatemala. Not *G[alemys]. micrurus* Pomel, Arch. Sci. Phys. Nat. (Geneva), 9:249, 1848 (= *Sorex talpoides* Gapper).
- 1877. *Blarina micrura*, Alston, Proc. Zool. Soc. London, p. 445.
- 1895. *Blarina tropicalis* Merriam, North American Fauna, 10:21, a renaming of *Sorex micrurus* Tomes, preoccupied.
- 1911. *C[ryptotis]. tropicalis*, Miller, Proc. Biol. Soc. Washington, 24:221.
- 1924. *Cryptotis micrura*, Miller, U.S. Nat. Mus. Bull. 128, p. 32.

LITERATURE CITED

- ALSTON, E. R. 1877. On an undescribed shrew from Central America. Proc. Zool. Soc. London, pp. 445-446.

- . 1879-1882. *Biologia Centrali-Americana*. Mammalia. London, xx + 220 pp. (The pertinent passage, p. 56, was published in 1879.)
- BACHMAN, J. 1837. Some remarks on the genus *Sorex*, with a monograph of the North American species. *Jour. Acad. Nat. Sci. Philadelphia*, 7: 362-402.
- CABRERA, A. 1925. *Genera mammalium*. Insectivora, Galeopithecina. Museo Nacional de Ciencias Naturales, Madrid, 232 pp.
- COUES, E. 1877. Precursory notes on American insectivorous mammals, with descriptions of new species. *Bull. U.S. Geol. and Geog. Surv.*, 3: 631-653.
- DE KAY, J. E. 1842. *Zoology of New-York, or the New-York Fauna*. . . . Pt. 1. Mammalia. Albany, xvi + 146 pp.
- GOODWIN, C. G. 1969. Mammals from the state of Oaxaca, Mexico, in the American Museum of Natural History. *Bull. American Mus. Nat. Hist.*, 141: 1-269.
- GRAY, J. E. 1843. Specimens of Mammalia from Coban in Central America. *Proc. Zool. Soc. London*, p. 79.
- . 1862. Catalogue of the bones of Mammalia in the collection of the British Museum. London, iv + 296 pp.
- HALL, E. R., AND K. R. KELSON. 1959. The mammals of North America. Ronald Press, New York. 1: xxx + 1 - 546 + 79.
- MERRIAM, C. H. 1895. Revision of the shrews of the American genera *Blarina* and *Notiosorex*. *North American Fauna*, 10: 5-34, 102-107.
- MILLER, G. S., JR. 1912. List of North American land mammals in the United States National Museum, 1911. *U.S. Nat. Mus. Bull.* 79, xiv + 455 pp.
- . 1924. List of North American Recent mammals, 1923. *U.S. Nat. Mus. Bull.* 128, xvi + 673 pp.
- MILLER, G. S., JR., AND J. A. G. REHN. 1901. Systematic results of the study of North American land mammals to the close of the year 1900. *Proc. Boston Soc. Nat. Hist.*, 30: 1-352.
- POMEL, A. 1848. *Etudes sur les carnassiers insectivores*. Pt. 2. Classification des insectivores. *Arch. Sci. Phy. Nat. (Geneva)*, 9: 244-251.
- TOMES, R. F. 1862. Report of a collection of mammals made by Osbert Salvin, Esq., F.Z.S., at Dueñas, Guatemala; with notes on some of the species, by Mr. Fraser. *Proc. Zool. Soc. London*, 1861: 228-288.

